

# Notice of Allowability

Application No.

09/551,215

Applicant(s)

SHAWCROSS, CHARLES BYRON  
ALEXANDER

Examiner

Syed Zia

Art Unit

2131

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/25/2004.
2. ☒ The allowed claim(s) is/are 25-38.
3. ☒ The drawings filed on 06 February 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

THOMAS R. PEESO  
PRIMARY EXAMINER

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 25, 2004 has been entered.

### ***Response to Amendment***

2. This office action is in response to amendment filed on August 25, 2004. Original application contained Claims 1-24. Applicant cancelled Claims 1-24 and added new Claims 25-38. The amendment filed have been entered and made of record. Presently pending claims are 25-38.

### ***Drawings***

Examiner acknowledges corrected drawings submitted on February 06, 2004. The submitted drawings have been entered and made of record.

### **Examiner's Amendment**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Allan Millard (Reg. No. 43,397) on November 29, 2004.

This application has been amended as follows:

#### **IN THE CLAIMS**

Replace Claim 31 as follows:

Claim 31 (New): The method of claim 25 wherein said distributed denial of service attack occurs at an upstream router and said filtering occurs at one or more downstream decoy forwarding servers.

***Allowable Subject Matter***

1. Claims 24-38 are allowed.
2. The following is an Examiner's statement of reason for allowance:

The above mentioned claims are allowable over prior arts because the CPA (Cited Prior Arts) of record fails to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited in independent Claims 25, 32, and subsequent dependent claims.

The CPA does not teach or suggest a system and method of communicating multicast packets in a IP multicast network between transmitter and subscriber end stations, using *multicast address hopping* technique, and varying the chosen multicast IP addresses according to a *predetermined scheme*, known to the end stations only, to protect publicly known insecure communication addresses, such as Internet, during information gathering, such as certain denial of communication abilities.

This new system of IP multicast address hopping during communication in a publicly known and insecure network prevents unauthorized personnel from knowing, which address to disrupt or monitor for traffic between transmitter and subscriber end stations by decoying unicast data intended for a host site for transmitting to another end station by multicast packets.

The present invention addresses the drawback of prior art of having publicly available communication addresses where undesirable third parties may launch an attack and overwhelm

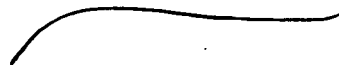
Art Unit: 2131

the particular address or monitor the address for information gathering not intended for the third party.

Thus this invention further extends the mechanism of securing and protecting the publicly known network addresses, such as Internet, by implementing spread spectrum technique of address hopping to permit secure communication.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.

Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."



THOMAS R. PEESO  
PRIMARY EXAMINER